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STEEL BATTALION™

P.R.F. ARMY
PACIFIC RIM FORCES ARMY CORPS
7th Special Panzer Div
34th Special Panzer
Battalion VT

ENGLISH

BEFORE PLAYING THE GAME

Thank you for purchasing STEEL BATTALION. Make sure you read all the instruction manuals before playing the game. After reading the manuals, keep them nearby in a safe place so you can refer to them quickly and easily.

WARNINGS

- Store the unit and all components away from children.
- Do not open or modify the unit or components.
- Do not spill water on the unit or components.
- Store the unit and components in a dry, dust-free location.
- If a problem should arise, stop use immediately.



SAFETY INFORMATION

ABOUT PHOTOSENSITIVE SEIZURES

A very small percentage of people may experience a seizure when exposed to certain visual images, including flashing lights or patterns that may appear in video games. Even people who have no history of seizures or epilepsy may have an undiagnosed condition that can cause these "photosensitive epileptic seizures" while watching video games.

These seizures may have a variety of symptoms, including lightheadedness, altered vision, eye or face twitching, jerking or shaking of arms or legs, disorientation, confusion, or momentary loss of awareness. Seizures may also cause loss of consciousness or convulsions that can lead to injury from falling down or striking nearby objects.

Immediately stop playing and consult a doctor if you experience any of these symptoms. Parents should watch for or ask their children about the above symptoms—children and teenagers are more likely than adults to experience these seizures.

The risk of photosensitive epileptic seizures may be reduced by sitting farther from the television screen, using a smaller television screen, playing in a well-lit room, and not playing when you are drowsy or fatigued.

If you or any of your relatives have a history of seizures or epilepsy, consult a doctor before playing.

Other Important Health and Safety Information. The Xbox Instruction Manual contains important health and safety information that you should read and understand before using this software.

AVOID DAMAGE TO YOUR TELEVISION

Do not use with certain televisions. Some televisions, especially front- or rear-projection types, can be damaged if any video games, including Xbox games, are played on them. Static images presented during the normal course of game play may "burn in" to the screen, causing a permanent shadow of the static image to appear at all times, even when video games are not being played. Similar damage may occur from static images created when placing a video game on hold or pause. Consult your television owner's manual to determine if video games can be played safely on your set. If you are unable to find this information in the owner's manual, contact your television dealer or the manufacturer to determine if video games can be played safely on your set.

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CONTROLLER SETUP

PRECAUTIONS

- Do not plug more than 2 **STEEL BATTALION** controllers into the same Xbox unit.
- Do not touch the **aiming lever** or **selection lever** when connecting the **STEEL BATTALION** controller or turning on the power.
- When attaching **STEEL BATTALION** controller pieces, do not mix up the left unit with the right unit. Be sure to attach them in their correct positions.
- The **STEEL BATTALION** controller is made with small, precision parts. Do not put anything on it or place it on an unstable shelf.
- Always turn the Xbox console off before removing the **STEEL BATTALION** controller.
- When cleaning the **STEEL BATTALION** controller, make sure you turn the power off beforehand. Clean the controller with a soft, dry towel. Do not use oil as it could cause fading or possible deformation of the unit.
- Do not drop the **STEEL BATTALION** controller.
- Do not forcibly bend the cable, pull it out or place a heavy item on it.
- When removing the cable, make sure you hold the area that attaches to the Xbox console to pull out the cable.
- Do not store the **STEEL BATTALION** controller in locations subject to extreme heat or cold, or where water or dampness could be present.
- Use the **STEEL BATTALION** controller for its intended purpose only.

TROUBLESHOOTING

Before sending the **STEEL BATTALION** controller out to be repaired, please perform the following checks:

The controller does not respond —

- Reconnect the controller from the beginning and restart the machine.

The aiming lever LED light does not come on —

- Move the **shift lever** over to a position where the LED will light up. Leaving the lever in a position where it will not light up for extended periods could cause the LED to stop lighting up.

RIGHT UNIT ASSEMBLY

Warning: Do not mix up the right and left units. Make sure you connect them in their correct positions.

1. Connect the centre unit and the right unit by inserting the connector cable into the jacks in both units.

ATTENTION: You must connect the cable end to the centre unit in the correct position. Check the direction in which the cable must be facing before attempting to plug it into the unit.

2. Make sure you insert the connector cable ends all the way into the jacks. Failure to do so could cause the controller not to operate.

3. Make sure the connector cable is not pinched between the two units.

WARNING: Pulling on the connector cable too roughly can break the wires inside and make the unit unusable.

4. Firmly attach the connector unit cover. A small **R** or **L** is written on the back of each connector unit cover. Use the **R** cover with the right unit and the **L** cover with the left unit.

5. Insert the screws into the four connector holes in the connector unit cover. Use the Alan wrench attached to the underside of the centre unit for this purpose.

6. Tighten the screws to finish.

LEFT UNIT ASSEMBLY

Follow the same steps as for connecting the right unit (above).

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Warranty. Microsoft Corporation ("Microsoft") warrants that this Game will perform substantially as described in the accompanying manual for a period of 90 days from the date of first purchase. This limited warranty is void if any difficulties with the Game are related to accident, abuse, virus or misapplication.

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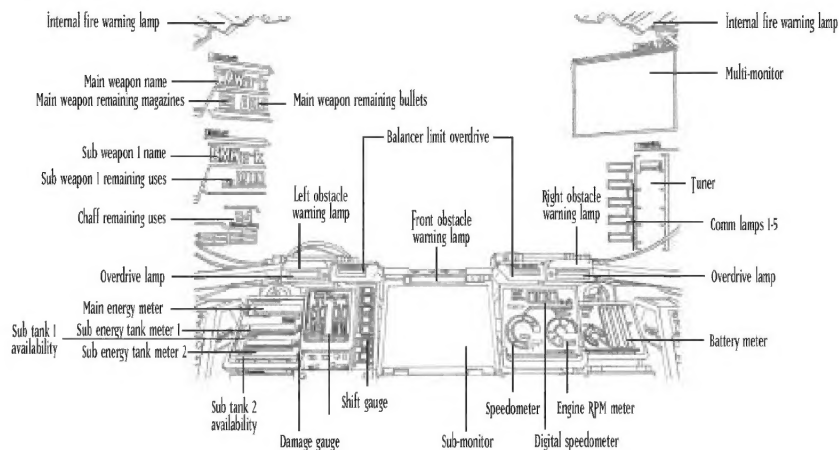
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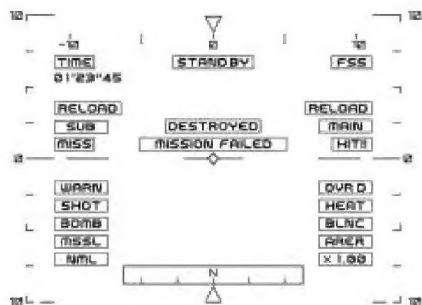
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COCKPIT: 3rd GENERATION

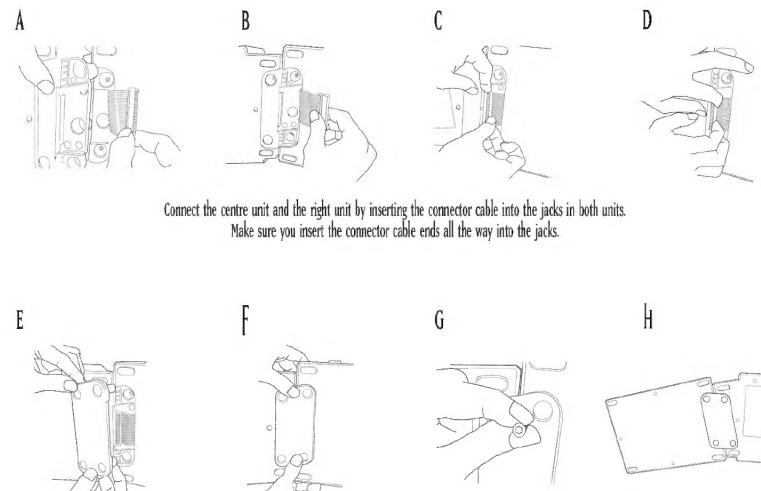


MAIN MONITOR DISPLAY: 3rd GENERATION



TIME	Remaining time
FSS	.....	Shows your FSS system is operating
SUB	.....	Sub weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your sub weapon
SUPPLY INFO	.....	STAND BY - Preparing to supply
	.....	REFUEL - Refueling
	.....	COMPLETE - Refueling has finished
DESTROYED	.....	An enemy has been destroyed
MISSION COMPLETE	.....	Shows how much of the mission has been completed
MAIN	.....	Main weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your main weapon
WARN	.....	Warns that the enemy is locked onto your VT
SHOT	.....	Shows the enemy has fired a non-guided weapon at you
BOMB	.....	Warning that curved trajectory bombs are coming
MISS	.....	Warning that a guided missile is coming
NVL	.....	Shows normal operation (non-overdrive)
OVRD	.....	Shows that you are in overdrive
HEAT	.....	Shows that the battery has overheated
BLNC	.....	Shows that the balancer is reaching critical mass
AREA	.....	Shows you are leaving the designated battlefield
x 1.00	.....	Main camera's magnification ratio
ANGLE OF DEPRESSION/ELEVATION	.....	Shows the camera angle
COMPASS	.....	Shows you the direction in which you are heading

STEEL BATTALION CONTROLLER ASSEMBLY



Connect the centre unit and the right unit by inserting the connector cable into the jacks in both units. Make sure you insert the connector cable ends all the way into the jacks.

Firmly attach the connector unit cover. Insert the screws into the four connector holes in the connector unit cover and tighten them.



FULLY ASSEMBLED STEEL BATTALION CONTROLLER

SECTION I. VT CONCEPT AND SPECIAL PANZER DIVISION

I-1 VT CONCEPT

The VT (Vertical Tank) has a short history and has only been used as a weapon for the last eight years. However, due to the fact that so many different organisations have started using the VT, it has great potential as a military weapon.

Military development has become saturated, and due to arms reduction, many military projects and unnecessary armies have been cut. The VT, with its impressive firepower potential and ability to be piloted by one person, will be used as a replacement for armoured tanks, and will no doubt be the main weapon of most organisations.

I-2 BASICS OF THE MILITARY USE VT

Until now, the VT has not been in general use as a military weapon. It has been used experimentally in local conflicts only twice. Currently, documentation concerning its military use is not complete. In order for the VT to reach its full potential, we must wait for research to be completed. The VT's military potential will increase based upon the size and scope of future conflicts. The VT will mainly be used as a powerful heavy firepower weapon, and will be effective when put into battle in mass numbers. One other major point that must be considered is that the VT has not been in use for as long, comparatively, as other previous weapons/vehicles. Therefore in order to maintain the VT's military power, back-up reinforcements will be invaluable.

I-3 DUTIES OF THE SPECIAL ARMORED UNIT

The role of the Panzer Unit that uses the VT as military equipment will be to carry out extremely important duties. In a mobile infantry battle, the Armored Unit will be used to destroy the enemy, capture key enemies, take over different enemy encampments, and occupy and maintain areas. The VT will mainly be used as a mobile platoon attacker and counterattacking defensive unit. Also, since time and topography are not a concern of the VT, it will serve as a key unit when attacking areas with problematic topography. The VT when used in conjunction with mobile units (tanks) will increase the firepower of the entire force. Sometimes it will be used with air forces or sea forces in order to take over key locations and when engaging in strategies for attacking behind enemy lines.

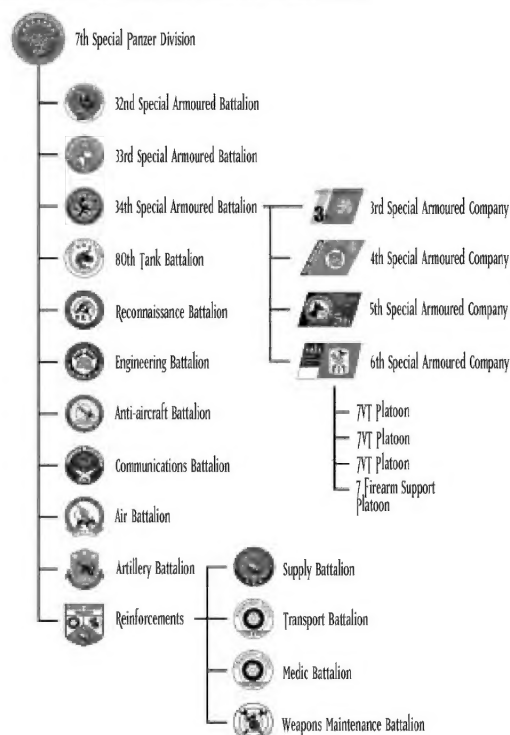
I-4 SPECIAL PANZER DIVISION FORMATION

A Panzer Division is formed of a command outpost, 3 VT battalions, 1 tank battalion, 1 artillery battalion, 1 recon battalion, 1 engineering battalion, 1 communications battalion, 1 anti-aircraft battalion, 1 air battalion, and 1 reinforcement battalion (see the chart on the right). The reinforcement division is composed of a supply battalion, a weapons maintenance battalion, a transport battalion, and a medic battalion. The VT battalion is composed of 4 VT companies. In each company there are 3 VT platoons and 1 firearm support platoon (with 3 machines in each platoon). The firearm support platoon is basically assigned a supportive role and will never attack independently.

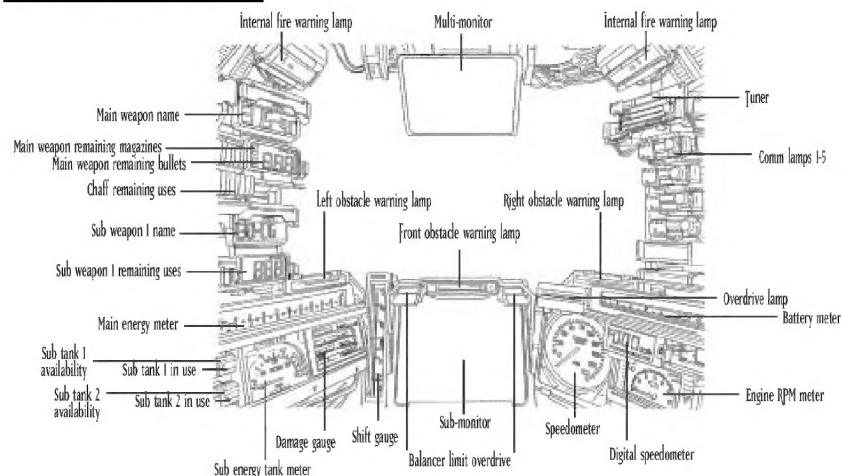
I-5 VT PLATOON OPERATION

One VT platoon is composed of 3 pilots who operate the small, middle, and heavy classes of VTs. The VT type is chosen based on the type of mission that has been assigned. Before a mission begins, the pilot puts in his VT type request. VT transportation and equipment for VT platoons come from the VT equipping battalion and are shipped to the various companies which then use transports to distribute the material to the various channels. There are 3 VT repairmen (1 head repairman and 2 regular repairmen) assigned to each VT. A commissioned chief equipment officer is assigned based on VT type. He controls all equipment. VT platoons are regularly dependent on company transports to get equipment, but during emergency battle situations they rely on division reinforcement supply battalions. Also, the weapons maintenance battalion is in charge of large-scale operations such as changing entire sets of parts.

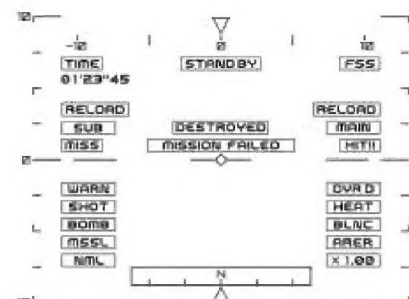
SPECIAL PANZER DIVISION FORMATION



COCKPIT: 2nd GENERATION



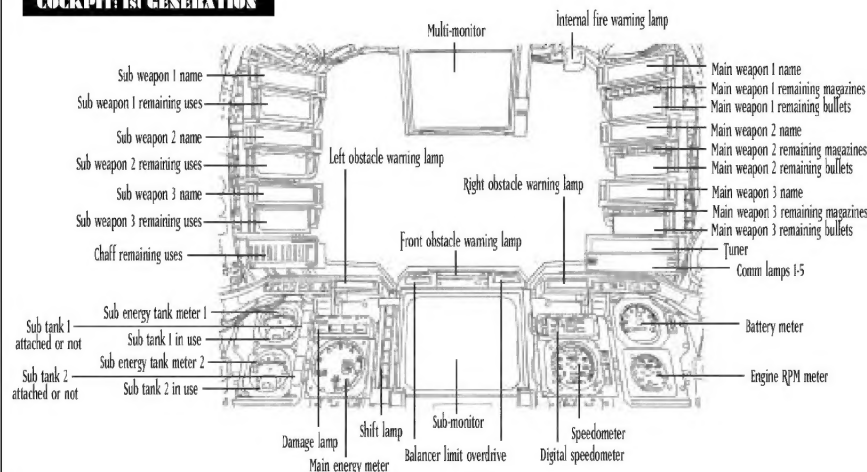
MAIN MONITOR DISPLAY: 2nd GENERATION



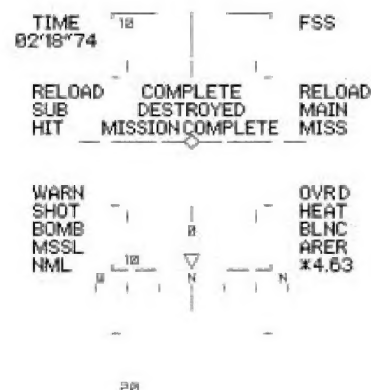
TIME	.....	Remaining time
FSS	.....	Shows your FSS system is operating
SUB	.....	Sub weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your sub weapon
SUPPLY INFO	.....	STAND BY - Preparing to supply
	.....	REFUEL - Refuelling
	.....	COMPLETE - Refuelling has finished
DESTROYED	.....	An enemy has been destroyed
MISSION COMPLETE	.....	Shows how much of the mission has been completed
MAIN	.....	Main weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your main weapon
WARN	.....	Warns that the enemy is locked onto your VT
SHOT	.....	Shows the enemy has fired a non-guided weapon at you
BOMB	.....	Warning that curved trajectory bombs are coming
MISS	.....	Warning that a guided missile is coming
NML	.....	Shows normal operation (non-overdrive)
OVERD	.....	Shows that you are in overdrive
HEAT	.....	Shows that the battery has overheated
BLNC	.....	Shows that the balancer is reaching critical mass
AREA	.....	Shows you are leaving the designated battlefield
x 1.00	.....	Main camera's magnification ratio
ANGLE OF DEPRESSION/ELEVATION	.....	Shows the camera angle
COMPASS	.....	Shows you the direction in which you are heading

TECHNICAL APPENDIX

COCKPIT: 1st GENERATION



MAIN MONITOR DISPLAY: 1st GENERATION



TIME	.....	Remaining time
FSS	.....	Shows your FSS system is operating
SUB	.....	Sub weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your sub weapon
SUPPLY INFO	.....	STAND BY - Preparing to supply
	.....	REFUEL - Refuelling
	.....	COMPLETE - Refuelling has finished
DESTROYED	.....	An enemy has been destroyed
MISSION COMPLETE	.....	Shows how much of the mission has been completed
MAIN	.....	Main weapon info
	.....	RELOAD - You are in the middle of reloading
	.....	HIT/MISS - You hit or missed with your main weapon
WARN	.....	Warns that the enemy is locked onto your VT
SHOT	.....	Shows the enemy has fired a non-guided weapon at you
BOMB	.....	Warning that curved trajectory bombs are coming
MSSL	.....	Warning that a guided missile is coming
NML	.....	Shows normal operation (non-overdrive)
OVRD	.....	Shows that you are in overdrive
HEAT	.....	Shows that the battery has overheated
BLNC	.....	Shows that the balancer is reaching critical mass
AREA	.....	Shows you are leaving the designated battlefield
LAG	.....	Main camera's magnification ratio
ANGLE OF DEPRESSION/ELEVATION	.....	Shows the camera angle
COMPASS	.....	Shows you the direction in which you are heading

SECTION 2. VT SUMMARY

2-1 BASIC VT PARTS

VTs are basically formed from three major units:

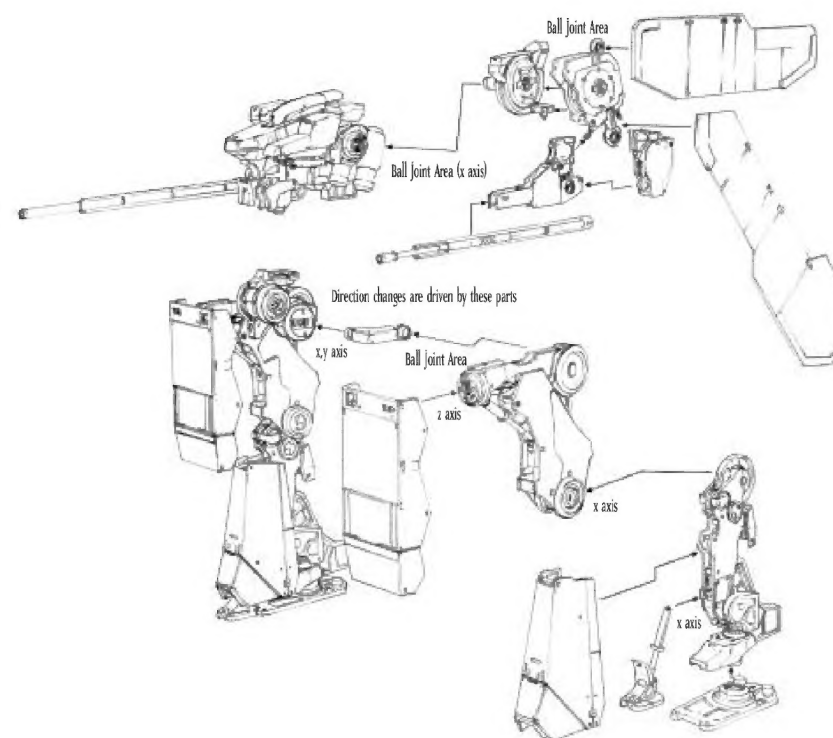
1. Main body unit
2. Leg unit
3. Weapons unit

Some weapons units mount directly onto the main body unit, while others work independently.

2-2 VT OPERATION SYSTEM

The VT operation is controlled with an OS known as the COOS. It controls the balancer in the leg unit as well as the targeting system for various weapons. Even if the VT type is the same, in cases where the loaded OS is different the battlefield performance is greatly reduced. The COOS, perfected through numerous experiments as well as on the battlefield, is one of the army's greatest secrets. Pilots must be aware of this fact, and if they eject during battle the VT must be destroyed to protect this technology.

VT STRUCTURE DIAGRAM



2-3 VT TYPES

VTs are categorised by type based on their weight. There are light, middle, and heavy types.

1. Light VTs

This is a model where the main focus is on mobility. It has been developed for use in situations where you are chasing after an enemy that is running away or for attacking enemy bases after their main firepower has been destroyed. Light VTs are capable of being transported by air and have been designed to be dropped into key drop spots. They can be essential for air assaults on bases.

2. Middle VTs

The average middle class operation VTs used as the main firepower in the Special Panzer Division. One of their main characteristics is that while they maintain a balance of firepower and strong armour, they are agile and can move quickly. Of the three types of VTs, this one is the most numerous. This VT has the most variation possibilities through add-on armour and weapons.

3. Heavy VTs

VTs with heavy armour and great firepower. They have less movement than light or middle level VTs. With their heavy firepower and armour, these VTs are mainly used to protect key locations and bases.

2-4 MOVEMENT

The average movement of middle level VTs is 100 kilometres per hour. They can move a maximum distance of 205 kilometres from the hangar. These basic values can change based on maintenance of parts, topography, and pilot's ability.

The balancer, which controls the stability of the leg unit, affects the movement of the VT. This ability is displayed in points. The higher the balancer points, the more stability your VT will have.

2-5 FUEL TANK AND SPARE TANKS

A fixed fuel tank is loaded on the main body unit. The fuel capacity of the tank differs with the type of tank used. The M-7 Decider VT (main force for the Pacific Rim Forces) has a capacity of about 6000 gallons and can operate for about 5 minutes per tank.

Some VTs have spare tanks that can increase operating time. The amount of spare tanks on a VT differs depending on the VT type, but on average a VT will only have one or two spare tanks.

A spare tank has a capacity of 6000 gallons.

By pressing the **Tank Detach button** on the main console you can release your extra fuel tanks and lighten your VT speed, increasing mobility. If you use up a spare fuel tank, make sure you detach it quickly.

2-6 FUEL CONSUMPTION AND ESTIMATED MOVEMENT TIME

You can refuel any fuel that has been used in battle by issuing a request for a re-supply. If you are in a situation where you cannot be re-supplied and you run out of fuel, there is the possibility that your VT could be marooned.

In order to prevent such situations, pre-battle briefing will have an estimated amount of movement time. Think about the amount of necessary movement for each battle and then decide the amount of spare fuel tanks that will be necessary.

The most fuel-efficient gear for the VT is 3rd gear, which offers the best standard movement and speed while the VT is patrolling. You can extend your amount of movement time by reducing the number of times you do sidesteps and other such moves which guzzle fuel.

2-7 DEFENSIVE ARMOUR

The VT's defensive power is known as its "armour resistance." A gauge on the control panel shows four different levels of resistance. Each time the VT is hit, it will take damage and the gauge will decrease. As this decreases the pilot will be at risk. If the gauge falls to danger levels a warning will be displayed. You should either back off from battle or consider ejecting as soon as possible. (For more on ejecting see sections 4-19 to 4-21.) You are able to add additional armour to your VT depending on its type.

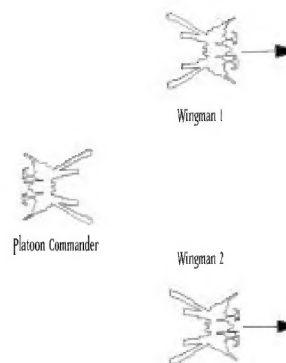
2-8 MAIN WEAPON AND SUB WEAPON

VT weapons are divided into main and sub categories. These should be considered different to standard weapons. Basically, main weapons are mounted onto the arm units of the VT, whereas sub weapons are mounted on other areas. You can determine the weapon type based on the location that weapon is mounted on. Weapons are not categorised by strength.

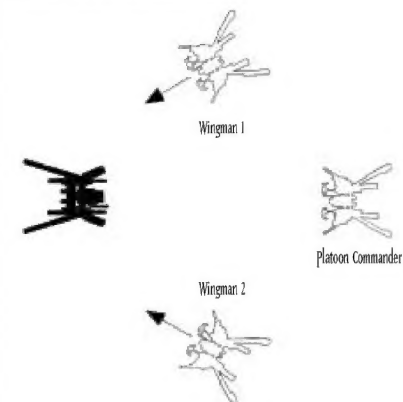
2-9 MAXIMUM WEAPON WEIGHT ALLOWANCE

VT weapons should be considered to be options. Some weapons can be used for any VT type, but others differ depending on which VT they are attached to. You can choose three of each sub and main weapon type. The weight in weapons that can be loaded differs depending on the VT type. The maximum weapons weight allowance (the total amount of weight in weapons that the VT is capable of carrying) is displayed to help you choose.

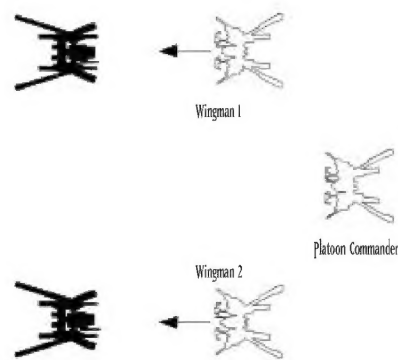
PLATOON ORDER: SEPARATE AND DISENGAGE



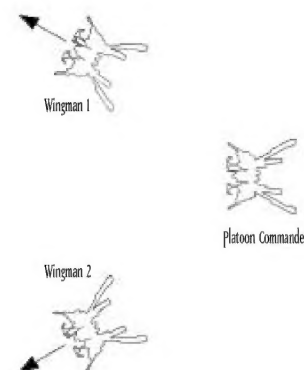
PLATOON ORDER: BACKUP



PLATOON ORDER: ATTACK



PLATOON ORDER: DISPERSE



SECTION 10. LEADERSHIP

10-1 LEADERSHIP DUTIES

A commander's duty is to issue orders to his troops and fulfil his designated mission. Commanders earn trust from their troops through solid leadership and maintaining a strong, stable division. Through this, they can increase their VT ability and skills.

10-2 NECESSARY QUALITIES FOR A COMMANDER

A commander has the responsibility to carry out his mission and is responsible for his troops. A commander must have a good knowledge of his troops, equipment, tactics, and strategy while also being a top-notch VT pilot. However, the most important responsibility of a commander is to earn his troops' trust, provide them with a role model, and proceed forward through his mission. He must work to break through tough situations. In battle he must maintain a strong will and sharp judgment. He must be quick and decisive. If the commander hesitates in battle then his troops become scared and lose their confidence. Because of this he must carefully analyse the mission he has been assigned and be able to plan independently.

10-3 ORDERS DURING BATTLE

The platoon commander must make each and every troop understand his duty, his job and the rules of engagement. He must command his troops so that they will be at their best. On this basis he can issue simple orders, making battle strategies simpler to carry out. The platoon commander must communicate his orders via the preset **communication button 4** or **5**, as per regulations. Doing this makes communications run more smoothly. There are 4 different orders that can be preset. Based on the battle plan, the platoon commander must choose 2 of these orders.

These are the 4 key orders (from which the platoon commander must choose 2):

1. Separate and Disengage

This is an order to separate from the fight. In the instance that one of the platoon's VTs is damaged, the platoon must try to disengage as quickly as possible. The platoon leader has a responsibility to carry out his order while protecting his men. So he must do whatever possible to keep his men alive.

2. Backup

The platoon troop must use his VT to back up another troop, in instances such as while co-operating with other forces, when contact with the enemy has been made, etc. This is to increase the attack power of the platoon to its fullest. The platoon commander thoroughly knows the rules and regulations and has used them in practice and command. He must raise the level of training for his troops as well.

3. Attack

This is an order to attack the main objective. The platoon commander issues this order based on the circumstances. The most important characteristic here is to be a role model for the troops, but achieving the objective is the main goal of the whole platoon. In instances where there are multiple targets, issuing this command will make accomplishing the mission easier.

4. Disperse

Whenever you sense the enemy coming you can issue an order to have your troops disperse. This order can be extremely helpful whenever the topography of the battlefield makes it a necessity or when you have to search large areas.

2-10 WEAPONS LOADED ON THE VT

270mm RIFLE

This weapon fires low-trajectory armour-piercing ammunition.

200mm ASSAULT RIFLE

Although its range is limited, the rapid self-loading system promises the highest rapid-fire capability.

270mm ASSAULT RIFLE

With a maximum of 5-round rapid-fire action, this weapon has plenty of destructive power to serve as the main anti-VT weapon. However, compared with other models of the same generation, its range is relatively short.

315mm TWIN RIFLE

This weapon fires two armour-piercing bullets simultaneously.

315mm RAPID FIRE RIFLE

With its three-round burst capability, this weapon has a higher rapid-fire efficiency than a normal rifle.

355mm RAPID FIRE RIFLE

With its three-round burst capability, this weapon has a higher rapid-fire efficiency than a normal rifle.

3270mm RIFLE



320mm SNIPER RIFLE

This weapon is designed to take out targets from a great distance. It has a greater range of fire than a normal rifle.

AK19-4A RECOILESS RIFLE

This gun fires high-explosive shells. It is lightweight and has approximately the same firepower as the rifle. However, due to the ammunition's slow rate of velocity, it is relatively easy for the enemy to evade it.

AK19-77 RECOILESS RIFLE

This gun fires high-explosive shells loaded with contact fuses. The ammunition will explode and inflict damage even if it is not a direct hit.

315mm SMOOTH BORE GUN

This weapon fires low-trajectory APFSDS ammunition. It also has a longer range of fire, compared to the rifle.

355mm SMOOTH BORE GUN

This weapon fires low-trajectory APFSDS ammunition. Compared to the rifle, it has a longer range of fire.

430mm SMOOTH BORE GUN

This weapon is the largest of its kind. Its destructive power and firing range specifications are more than satisfactory.

67mm CHAIN GUN

This weapon has very high rapid-fire capability and shoots small armour-piercing ammunition. Since its firepower is relatively small, it is an ineffective weapon against VTs. However, it is very effective against AFVs and assault helicopters.

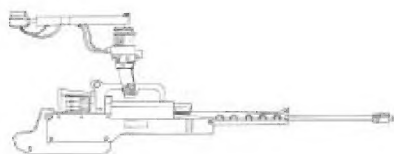
80mm CHAIN GUN

This weapon has a very high rapid-fire capability and shoots small armour-piercing ammunition. Since its firepower is relatively small, it is an ineffective weapon against VTs. However, it is very effective against AFVs and assault helicopters.

100mm CHAIN GUN

This weapon has a very high rapid-fire capability and shoots small armour-piercing ammunition. Since its firepower is relatively small, it is an ineffective weapon against VTs. However, it is very effective against AFVs and assault helicopters.

67mm CHAIN GUN



120mm HEAVY MACHINE GUN

This is a more destructive weapon than the chain gun. Although it has a high rapid-fire capability, it is not as effective as an anti-VT weapon. However, it is very effective against mobile support cannons.

140mm HEAVY MACHINE GUN

This is a more destructive weapon than the chain gun. Although it has a high rapid-fire capability, it is not as effective as an anti-VT weapon. However, it is very effective against mobile support cannons.

135mm PITO - HEAVY MACHINE GUN

This is a heavy machine gun that fits under the VT's body unit. It is more powerful than the chain gun, and the added rapid-fire feature makes this weapon a nice secondary arsenal.

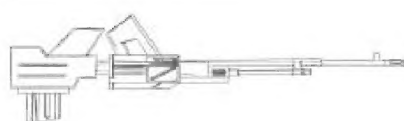
MK21 ANTI LAND ROCKET CANNON

This weapon can fire six mid-sized anti land rockets simultaneously.

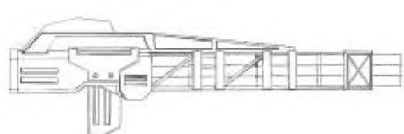
MK34 ANTI LAND ROCKET CANNON

This weapon can fire four mid-sized anti land rockets simultaneously, and is a lethal threat to any VT.

120mm MACHINE CANNON



MK21 ANTI LAND ROCKET CANNON



SECTION 9. SUPPLY

9-1 ACCEPTING SUPPLIES

Supplies are necessary for maintaining the power of the VT. Find a location where you can re-supply yourself in battle. Re-supplying during a battle is a regular and arduous task. During a battle, try receiving supplies only when you have some cover or late at night. Supplies for VTs are carried out via a supply helicopter under the Supply Battalion of the Reinforcements Division. Not only can you refuel and replenish your bullets, but the supply helicopter can also bring new armour, additional armour, and replacement parts for your VT. For smooth supplying, be sure to issue your estimated supply request before going out on your mission.

9-2 CLASSIFYING SUPPLIES

In order to make the issuing of supplies an easier task, they have been separated into 5 major groups. With a few exceptions, the majority of parts you will request before a battle will fit into the following 3 groups.

These are issued as one order to each VT.

1. Type 1 supplies: Foodstuffs
2. Type 3 supplies: Liquids (oil, fuel, lubricant)
3. Type 5 supplies: Various bullets

Before going out to battle, each pilot must create a list of the necessary supplies and get it approved by his commanding officer.

9-3 SUPPLY VIA SUPPLY HELICOPTER

During battle, supplies to VTs are brought in via a supply helicopter that operates under the Division Supply Battalion. When you request supplies, the helicopter heads to the VT location. Once it arrives, it begins to hover. The pilot must move the VT below the helicopter. Then the transference of fuel and bullets occurs. You can also transfer new armour and replacement parts for your VT.

9-4 CHOICES AND CAUTIONS WHEN RECEIVING SUPPLIES

Since it takes time to re-supply, there is a temporary amount of time when both your VT and the supply helicopter are open to attack. In order to prevent attack you must examine the surroundings and be cautious of your environment. Try to set the re-supply location at a site that has some cover and few visible enemies. This is an important measure in preventing the helicopter from being shot down before it can re-supply you.

9-5 OPENING OF SUPPLY ISSUANCE CENTRE

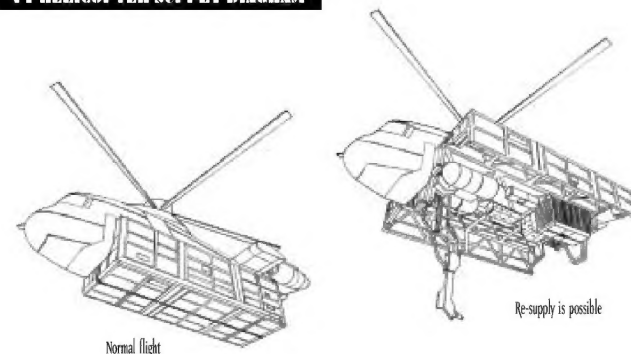
Sometimes due to battle circumstances or weather problems, the supply helicopter cannot come to re-supply. In order to solve these situations, a supply issuance centre has been set up behind friendly force lines. The location of the supply issuance centre is determined before a battle, and is set up using these guidelines:

1. It has an adequate amount of space to store necessary supplies.
2. A favourable path connects the front lines with the back lines.
3. It is hidden from enemy vision.
4. It has coverage from enemy firepower.

The Supply Issuance Centre is only set up in locations where the front line has been fixed and there is an encampment covering the area. Basically, it is a unique exception.

As a basic VT duty, you are expected to refuel using the supply helicopter whenever possible.

VT HELICOPTER SUPPLY DIAGRAM



8-4 SENDING A MESSAGE

1. Choose the person you will call by dialling their channel on the tuner.
2. Press **communication button 1** (call/respond) to place the call.
3. The person you are calling will respond.
4. After making sure this is the correct person, state your request.
5. The other person will check your request.
6. The call will end.

8-5 RECEIVING A MESSAGE

1. When a message comes in, your communication panel will begin to flash. Turn the tuner to the flashing channel. By doing this you can hear the other person's message.
2. Press **communication button 1** (call/respond) and respond to the message.
3. The other person will see that you responded and state the message.
4. After you hear the message, press **communication button 1** (call/respond) to finish the call.

8-6 REPEATING THE MESSAGE

If you did not catch what someone said in their communication, press **communication button 2** to request that the person repeat the message. You can make a request any time the communication panel is flashing (indicating that the lines are open). Once you press **communication button 1**, the communication will end and the line will be closed.

COMMUNICATIONS PANEL CHANNEL SETTINGS

	Comm Panel 1	Comm Panel 2	Comm Panel 3	Comm Panel 4	Comm Panel 5
MIS00					
MIS01					
MIS02					
MIS03	Command	Supply	VT Commander		
MIS04	Command	Supply	VT Commander		
MIS05	Command	Supply	VT Commander		
MIS06	Command	Supply	VT Commander		
MIS07	Command	Supply	VT Commander		
MIS08	Command	Supply	VT Commander		
MIS09	Command	Supply	VT Commander		
MIS10	Command	Supply	VT Commander		
MIS11	Command	Supply	VT Commander		
MIS12	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS13	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS14	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS15	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS16	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS17	Command	Supply		Spy Division	
MIS18	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS19	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS20	Command	Supply			
MIS21	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS22	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2
MIS23	Command	Supply	Wingman 1	Wingman 2	Wingman 1/2

NOTALL - ANTI-VT GUIDED MORTAR

This is the only high-angle fire anti-VT weapon that has homing capability.

RAILGUN A

This is the most recent weapon developed by the PRF. With the use of an electro-magnetic pulse, this weapon fires its ammo at hypervelocity speeds. It has an unparalleled long attack range and firepower.

RAILGUN B

A railgun developed by the Hai Shi Dao. With the use of an electro-magnetic pulse, this weapon fires its ammo at hypervelocity speeds. It has an unparalleled long attack range and firepower.

HYM LAUNCHER

This weapon fires jet propelled armour-piercing ammunition. Although its range and firepower are of the highest class, it is not equipped with a homing system.

225mm HOWITZER

This weapon fires grenade shells in a high-arc trajectory. Although not too destructive, it is capable of inflicting damage in a fixed radius upon impact. It is very effective against populated areas of AFVs.

RAIL GUN



305mm HOWITZER

This weapon fires grenade shells in a high-arc trajectory. Although not terribly destructive, it is capable of inflicting damage in a fixed radius upon impact. It is very effective against populated areas of AFVs.

370mm HOWITZER

This weapon fires grenade shells in a high-arc trajectory. It is capable of inflicting damage to a fixed radius upon impact. Depending on its use, it can be highly effective.

550mm HOWITZER

This weapon fires grenade shells in a high-arc trajectory. It is very destructive and capable of inflicting tremendous damage to a fixed radius upon impact.

8 CAPACITY MLRS (Multiple Launch Rocket System)

This 8-round capacity MLRS launches large rockets with high-angle fire trajectories. It is able to inflict damage with its large blast radius. This is very effective when you want to clear out a large area of land.

370mm HOWITZER



CALL SIGN LIST (printed 2080)

Group	Call Sign	English Name	Formal Name
Player(Platoon)	Oscar 3	Oscar 3	7th Special Panzer Division, 34th Special Armoured Battalion, 6th Special Armoured Company, 1st Platoon 3rd VT
Commander	Oscar 1	Oscar 1	7th Special Panzer Division, 34th Special Armoured Battalion, 6th Special Armoured Company, 1st Platoon 1st VT
Main Battalion	Argus	Argus	7th Special Panzer Division, 34th Special Armoured Main Battalion
Supply	Wagonmaster	Wagonmaster	7th Special Panzer Division, Reinforcement Supply Battalion

CALL SIGN LIST (printed 2082)

Player(Platoon)	Xray 1	Xray 1	7th Special Panzer Division, 34th Special Armoured Battalion, 6th Special Armoured Company, 1st Platoon 1st VT
Wingman 1	Xray 2	Xray 2	7th Special Panzer Division, 34th Special Armoured Battalion, 6th Special Armoured Company, 1st Platoon 2nd VT
Wingman 2	Xray 3	Xray 3	7th Special Panzer Division, 34th Special Armoured Battalion, 6th Special Armoured Company, 1st Platoon 3rd VT
Main Battalion	Argus	Argus	7th Special Panzer Division, 34th Special Armoured Main Battalion
Supply	Wagonmaster	Wagonmaster	7th Special Panzer Division, Reinforcement Supply Battalion
Spy	Blackwidow	Blackwidow	????????

COMMUNICATION BUTTONS (2080)

Comm Button 1	Comm Button 2	Comm Button 3	Comm Button 4	Comm Button 5
Call/Respond	Repeat		Supply Request	Backup Request

COMMUNICATION BUTTONS (2082)

Comm Button 1	Comm Button 2	Comm Button 3	Comm Button 4	Comm Button 5
Call/Respond	Repeat		Supply Request	

12-CAPACITY MLRS

This 12-round capacity MLRS launches large rockets with high-angle fire trajectories. It is able to inflict damage with its large blast radius. This is very effective when you want to conquer a large area of land.

DUAL-POD COMPACT MISSILE LAUNCHER

This is a compact two-missile launcher that fits under the VT's body unit.

TRIPLE-POD COMPACT MISSILE LAUNCHER

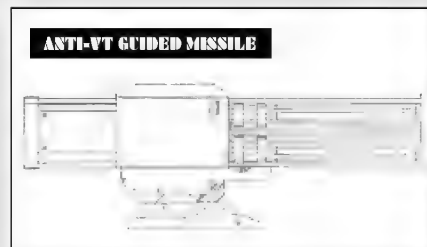
This is a compact three-missile launcher that fits under the VT's body unit.

ASLAM (Advanced Stand Off Land Attack Missile) ANTI-VT GUIDED MISSILE

A fire-and-forget infrared guided missile. Depending on the programming of the VT's movement patterns, its target acquisition accuracy improves, which translates to an extremely high number of direct hits.

POWIT-ANTI-VT GUIDED MISSILE

A fire-and-forget infrared guided missile. Although inferior when compared with the ASLAM, it is still an accurate and destructive missile.



DUAL-LOAD COMPACT GUIDED MISSILE

This is a compact two-guided-missile launcher that fits under the VT's body unit. Although its performance is not high, it is equipped with a homing system.

AVTDV GUIDED MISSILE

This is a large anti-VT missile that is also known as the "VT killer." It is the deadliest missile due to its advanced guidance system, long range of fire and destructive force.

ALC205 PLASMA TORCH

Designed especially for close combat with VTs, this weapon is very destructive and has the advantage of being able to take down an enemy with a direct hit.

ALC220 PLASMA TORCH

Designed especially for close combat with VTs, this weapon is very destructive and has the advantage of being able to take down an enemy with a direct hit.

NAPALM

Napalm rounds can be loaded into any of the compact launchers that fit underneath the VT body unit. Napalm is very effective in sweeping out ground enemies because of its natural ability to set ablaze a fixed area of land. A direct hit on a VT with napalm will set it on fire.

ALC205 PLASMA TORCH



SECTION 2. RADIO TRANSMISSIONS

B-1 SUMMARY

Communications has the important role of helping relate key information, changing plans within groups, helping carry out important orders, and assisting in the transfer of new orders and information.

Every VT has a JARC-F522 radio for communications.

In the platoon commander's VT there are 2 JARC-F522 radios or 1 JARC-F522 radio and 1 JARC-A232 radio. Try to pronounce clearly when speaking over the radio and keep the conversation to the point. Also, be careful of enemy listening devices and keep your identity secret by using call signs whilst talking.

B-2 PRESET CHANNELS

Some channels are preset in the standard VT radio. This saves the time it would take to tune into each of these channels, time that you may not have in the heat of battle. You can have up to 5 preset channels for your VT radio.

B-3 RADIO COMMUNICATION PROCEDURES

Communication via the radio is carried out by selecting channels using an antenna. Then press the **communication button** to begin the transmission. Communication is fixed to 3 possible choices. You cannot change what each of these **choice buttons** does. The choices are as follows:

- **Communication button 1** — Respond/call
- **Communication button 2** — Repeat
- **Communication button 3** — Supply request

COMMUNICATIONS PROCEDURES (example: order to retreat)

COCKPIT:



MAIN BATTALION COMMAND ROOM:



- | | |
|----|------------------------------------------------------------------------------------------------------------------------------------------|
| 1. | Communication panel 1 (from the main battalion Argus) begins to flash. This signals that a message from the main battalion is coming in. |
| 2. | Set the tuner on Communications Panel 1. |
| 3. | Press Communication Button 1 (respond/call) and open a connection.
"This is Oscar 3. Argus, go ahead." |
| 4. | The battalion head gives his message.
"This is Argus. Your division is in a bad spot! Disengage immediately!" |
| 5. | After you hear what was said, press Communication Button 1 (respond/call).
"Oscar 3. I copy that." |
| 6. | If you did not hear the message, press Communication Button 2 (repeat). |
| 7. | Finish the communication. |

SECTION 7. PLATOON STRATEGY PREPARATIONS

7-1 ORDERS

Basically speaking, battalions and companies give orders to platoons. Orders are given via written messages, as well as through speech. Most commonly, before every mission there will be a briefing in which some of the following information will be displayed:

- Mission objective
- Enemy information
- Friendly units situation
- Topography
- Battlefield state
- Estimated mission completion time

After that, officers of differing rank will help analyse the orders and you will make a plan of attack for your platoon.

7-2 MISSION ANALYSIS

Once you receive a command from one of the high level commanders (battalion/company), the platoon division commander will analyse the mission based on key information. The mission analysis includes:

- Mission breakdown
- Enemy information
- Topography
- Weapons that can be used in the current mission
- Necessary equipment and supplies

Before the strategy preparations end, you must request your VT type and weapons as well as the necessary equipment to take. You should also check your mission objectives again.

You should also make sure that other platoon members are positively sure of their mission goals, and that they will not make any mistakes during battle.

7-3 CHOOSING WEAPONS

A VT pilot must choose which weapons to take along in battle. These weapons must be appropriate for the mission objectives. You can carry 3 main weapons and 3 sub weapons, but you cannot exceed the maximum weight allowance for your VT type when choosing weapons. Note that even if you do not exceed the maximum weight balance for the VT, carrying close to the maximum allowed weight limit is in itself bad for your balancer and can greatly reduce the VT's performance.

7-4 SELECTION OF ADDITIONAL ARMOUR AND SUB WEAPONS

Whenever you add extra armour onto your VT, you will automatically be equipped with the sub weapon armoured missiles. This will reduce the number of selectable sub-weapons by one. Please make sure that with the armour attached you do not exceed the maximum weight allowance.

7-5 CHOOSING YOUR VT

There are 3 types of VT that are distributed to platoons: Light, Middle, and Heavy. You choose your VT based on the mission but the actual decision is left to the pilot. Also, when participating in an air drop mission, you can only choose the light type VT.

7-6 ATTACHING EXTRA FUEL TANKS AND ARMOUR

Based on the mission, you may choose to add extra fuel tanks or armour. However, additional armour can only be used on a limited number of VTs. Also, be sure that the final total of your armour, extra fuel and weapons does not exceed the maximum weight allowance. To learn more about the relationship between sub weapons and additional armour, read section 7-4.

7-7 SUPPLY REQUESTS

Before you go out to battle, the estimated number of bullets you will use for that mission will be supplied to you. However, if you run out of ammo in battle you will quickly need to get more. In order to achieve smooth supply transfer you will need to have all pilots estimate the number of extra rounds they think they will use in battle and send in a supply order form to the reinforcement battalion beforehand.

7-8 FIXED VT FOOD PROVISIONS

Since operation time for a VT is rather short, regular food provisions are issued from the Provision Company. However, since in some cases food cannot be issued, each VT is loaded with an emergency food supply equivalent to 4 servings. In situations where there is no other way, each ranked commander is responsible for using these. After they are used, an upper level commander should be told immediately, so that they can be replenished.

7-9 BRINGING PERSONAL EFFECTS INTO THE COCKPIT

There is a compartment for holding provisions inside the cockpit. If the personal effect is capable of fitting into the compartment space then it is possible to bring personal items into the cockpit. However, carrying private items into the VT must be cleared beforehand by an accompanying commander. Also, it is forbidden to carry the operation manual, which is strictly confidential, into the VT.

FLAME THROWER

This is a close combat weapon that attaches beneath the VT's body unit. A direct hit with this weapon will cause a VT to explode in flames.

NTN ROD

Designed especially for close combat with VTs, a direct hit with this weapon will cause massive volts of electricity that will incapacitate the enemy VT temporarily.

CUTTER BOOM

This large cutter boom is retrofitted for a VT for close combat. It is the most destructive close-combat weapon.

AIR TIMED GRENADE

This grenade is designed especially for close combat. Because of the contact fuses inside, the grenade will detonate and inflict damage even without direct contact with the target.

1 ROUND CAPACITY AIR TIMED GRENADE

This grenade is designed especially for close combat. Because of the contact fuses inside, the grenade will detonate and inflict damage even without direct contact with the target.

SMOKE CHARGER

This weapon fires four rounds of smoke grenades. Its sole purpose is to create dense smoke that blinds the enemy's visibility thus disabling the enemy's attack capability.

AIR TIMED GRENADE



PROJECTILE ANTI-VT MINE

This weapon is capable of discharging 3 forward-projecting anti-VT mines simultaneously.

PROPELLANT TANK

This is a fuel tank for the VT. After the tank is empty, it can be detached to lighten your load.

ADDITIONAL ARMOUR

Additional armour allows for increased durability of the VT. It also grants the pilot the ability to use the guided missiles loaded inside the armour pod. Press F1 during combat to release them.

REPLACEMENT SUPPLY

The replacement supply includes ammunition and fuel. One replacement supply will be delivered upon request of a supply chopper.

ROOM BOX

This antique cassette radio was discovered inside the storage area of the training facility. Hang it inside the cockpit to listen to some tunes during combat.

3-11 TARGETING OF CURVE TRAJECTORY WEAPONS ON WAR MAP

You should lock-on your target beforehand when using a weapon that uses a curved firing trajectory. When you choose a curved firing trajectory weapon, the target, firing direction, and where the weapon will land will be displayed in a white line on the War Map. You can use this information to help you to hit the enemy even when you are not locked on.

3-12 SHORT FUSE

In ammo for the Akig-77 non-recoil cannon and in short-range grenades, a short fuse has been set (a contact fuse would typically be used for normal artillery). Short fuses use magnetism to find their targets and then explode once they are within a set distance. Thanks to this, you do not have to hit the target directly to damage it. In a battle of quick, mobile VTs, these short fuses can play a great support role in damaging the opponent.

3-13 CHAFF DEFENCE

To defend against radar guided missiles, the VT has been equipped with a chaff dispensing unit. The chaff explodes into 4 different directions after the VT has been fired upon by a missile. Aluminium shards explode into the air and the guided missile locks onto the chaff, making the missile miss its target.

If you perform a side-step after you release the chaff, you can dodge the missile more effectively.



SECTION 3. SPECIAL FUNCTIONS THROUGH 2ND GENERATION COOS

3-1 ADDITIONS FOR 2ND GENERATION COOS

Currently the COOS that powers all the VT's movements has switched over to the 2nd generation and has increased the functionality of the VT's abilities. Beside an increase in processor power, the COOS has new anti-VT guidance weapons loaded, and a usable Target Estimating Firing System (FSS). These new additions give the VT even more destructive power. Below is a listing of many of the 2nd generation COOS's functions.

3-2 FSS (Target Estimating Firing System) FUNCTION

The FSS analyses the target VT's movement pattern, the distance of bullet flight and amount of time the round will be in the air. It then automatically moves the target finder onto the enemy's next probable location. The FSS targeting mode and regular "straight targeting" can be switched by pressing the FSS button. Check section 5-4 for more information about the FSS.

3-3 OVERDRIVE FUNCTION

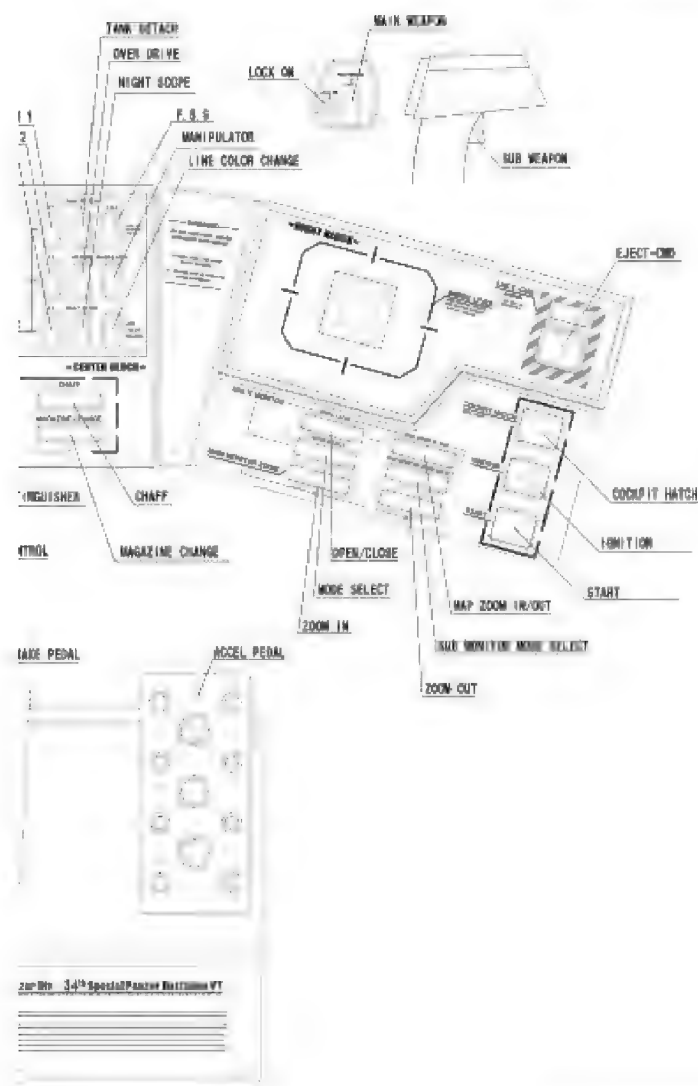
This function is used to give the VT a speed increase for a limited time. It turns off the "speed limiter" that protects various joints from wear and tear. For more information of the overdrive function, check section 4-6.

3-4 STEALTH FUNCTION

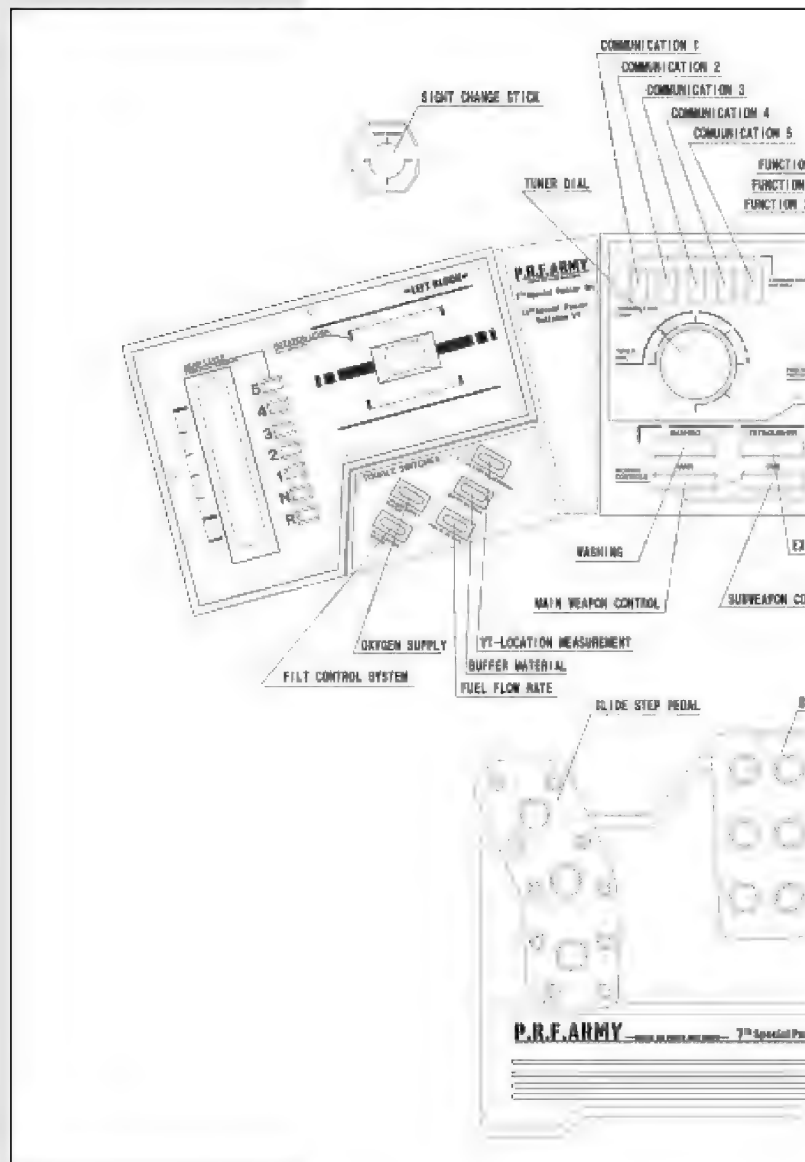
A stealth function included in the VT allows it to avoid being caught on radar. This is accomplished using radar absorbent paint, improving gas releasing ducts, and making the main hull more aerodynamic.

3-5 GUIDED WEAPONS

One of the major new characteristics of the 2nd generation COOS is the increased use of guided weapons. New anti-VT guided missiles have been added to the already established Laser Active Guidance System. This system analyses VT movement patterns and predicts the enemy's next location using the FSS in real-time, increasing hit accuracy. It is expected that the new system will be highly effective in anti-VT battles.



STEEL BATTALION CONTROLLER CONFIGURATION



SECTION 4. VT CONTROLS

4-1 STARTUP SEQUENCE

When you first enter a VT before moving it into battle, the VT battery, its fuel tank and weapons are at maximum capacity. The VT startup sequence is listed below.

1. Close the Cockpit Hatch

Press the **Cockpit Hatch button** on the right side. Be sure to check whether the cockpit hatch is closed or open.

2. Press the Ignition Button

Press the **Ignition button** below the **Cockpit Hatch button**. The engine will start and power will flow into the cockpit from the generator. The VT's OS comes online and a simple check of the functions is automatically displayed on the screen before the Startup Function screen.

3. Startup Functions

After the functions check is displayed, you must power up each of the following functions while checking to see if they are operational. Flip them up one by one using your forefinger to power them up.

- Oxygen Supply System (OSS)** – Supplies the inner cockpit with stable, breathable oxygen.
- Filter Control System (FCS)** – Toggle switch that powers the hot gas removal system. Removes hot gas and stabilises the engine.
- VT-Location Measurement (VT-LM)** – Unit Locator Estimation System. A function used to automatically display your VT on the War Map.

- Buffer Material (BM)** – A system that exudes a protective material around the cockpit to protect it from attacks. It coats the cockpit and main chest area of the VT with a hard gel for protection.
- Fuel Flow Rate (FFR)** – A system that regulates fuel flow. It controls fuel flow and disperses the correct amount of fuel based on the current engine condition.

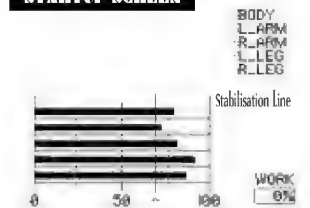
4. Press the Start Button

Once you complete the initial startup sequence, an image of the exterior surroundings is displayed. Then energy is supplied to various VT joints via an actuator. After the various systems have crossed over the stability line, press the **Start button**. After you have completed the various functions, your VT should lock into start mode and you can begin controlling it.

4-2 WHEN STALLING THE VT DURING STARTUP

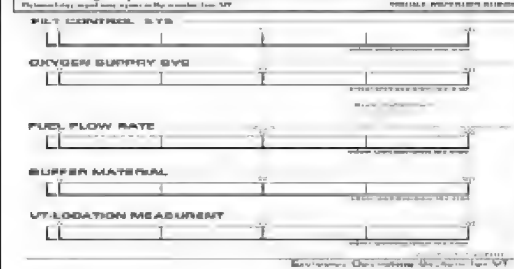
Pressing the **Start button** when all of the systems have NOT crossed over the stability line will cause various joint parts to cease from locking, cancel the startup sequence, and stall the VT. This is to protect the VT from being damaged through pushing the VT over its limit. If you stall the VT during startup, relax and wait for the various system gauges to re-power. Then you can re-attempt to start up the machine by pressing the **Start button** again.

STARTUP SCREEN



PRIMARY SYSTEMS STATUS CHECK

Primary Systems Status Check



BASIC CONTROLS

4-3 MOVING AND STOPPING

Moving and stopping are the two most basic movements of the VT. You can shift the **gear lever** from 1st to 5th speeds. Pressing the **accelerator** increases the engine's RPMs and the VT moves forward. You can shift the **gear lever** into reverse to move backward. You stop the VT by taking your foot off the **accelerator** and pushing down on the **brake pedal**. If you make sharp turns while moving at high speeds your VT can tip over, so be careful.

4-4 ACCELERATION AND DECELERATION

The amount of acceleration and deceleration depends on the amount of pressure you apply to the **accelerator**. Brakes are used by pressing the **brake pedal** or through downshifting. In neutral your VT will be at 0 mph. With each gear level you gain more speed but lose torque. On areas where your speed is not increasing smoothly you may want to downshift for better fuel efficiency. Shifting the **gear lever** into reverse reverses the VT.

4-5 ROTATION

Rotating the VT is performed by pressing the **left rotation handle** ← or →. The rotation speed increases based on the amount the **rotation stick** is pressed in either direction. If the balancer cannot maintain total VT balance then the VT will tip over, so be careful.

4-6 OVERDRIVE

This function was developed after several skilled pilots requested it. It disables the speed limiter that protects various joints from wear and tear, resulting in an increase in speed. The limiter lock is turned off when you press the **Overdrive button**. Pressing the **Overdrive button** again reactivates the lock. When the VT is in overdrive, its fuel consumption is triple the amount of normal operation, so be careful when using it.

4-7 SLIDESTEP FUNCTION

This is the one of the VT's special ways of dodging incoming firepower. It is a major difference between the VT and a regular tank. You can quickly move to the right or left using the OS's programming. You can also use this function to quickly regain

balance in the event that your VT is about to tip over. The sidestep is used as a quick motion to one of four directions using pre-programmed paths. It is carried out by a combination of accelerating and using the balancer. The balancer automatically strengthens the joints/areas that will take the brunt of the wear and tear. The sidestep is performed by pressing the **rotation lever** ← or → while simultaneously pressing the **sidestep pedal**. The sidestep is a great way to dodge an enemy attack. Another movement can be accomplished by leaving the **rotation lever** in neutral and pressing the **sidestep pedal**. This will cause your VT to do a forward dash. Performing this function while in reverse results in a back dash.

4-8 SLIDESTEP FUNCTIONAL LIMITATIONS

Performing a sidestep places great stress on the joint sections of the VT. To decrease wear and tear, a large amount of energy is used via the actuator. Energy originating in the generator is then recycled to the main battery, but the battery power is greatly reduced each time a sidestep is performed. In cases where there is not enough power, the sidestep is automatically cancelled. When the battery is running low, a heat warning is displayed. Do not use a sidestep when this is displayed.

4-9 SLIDESTEP TIP REGULATOR

Whenever the VT movement exceeds the balancer's limits, there is the possibility that the VT will tip over. Tipping occurs through reckless operation or sharp turning at high speeds. It can also occur when an enemy hit is taken. Whenever tipping seems likely to occur, pressing the **sidestep pedal** will re-balance the VT. However, if the VT is low in battery power it will be unable to use this manoeuvre. If you do happen to tip over, releasing the **accelerator** and then pressing it again it will make your VT stand back up.

4-10 CUT-OFF FUNCTION

In cases where you incur damage that exceeds max damage capacity, your VT will automatically power down (cut-off) to protect various joint sections from further harm. When a cut-off occurs, all locks are undone and the VT stalls. You must then quickly run through the startup sequence again to re-power the VT.

SECTION C. VT MOVEMENT

6-1 IN GENERAL

This section explains the basic rules of VT movement on the battlefield.

Movement is used to hide out of the enemy's line of sight and to avoid areas where potential enemies may lay. It should also be used to avoid areas of concentrated enemy firepower. A pilot could assume that the enemy will concentrate its VTs on terrain that is easily manoeuvrable for the VTs, so it should be noted that fighting in an area that VTs have a hard time adapting to could actually be advantageous.

When moving through areas where your VT could easily get stuck, you may need reinforcements from the engineering section.

6-2 USING WEATHER AND TOPOGRAPHY

On the battlefield you should always try to move effectively though the weather and topography. It is more important to do that than to worry about coming into contact with the enemy.

A VT, when compared to a walking machine or a tank, may not be as easily affected by topography. But with its massive size it stands out and is easily locatable by the enemy.

Try to make good use of the surrounded topography when you are in a situation where you may come into contact with the enemy. With the development of energy fields (ECM) in particular, the importance of using the topography and to have a good line of sight become all the more important. In these cases, estimating enemy movement and dodging artillery are areas you must focus on.

• Forest

Trees are better than anything else at hiding tall VTs. They also make excellent obstacles for oncoming firepower.

• Exposed Land

There is no cover so you must move around as normal.

• Enclosed Roads/Valleys

Paths that you can move on are limited by valleys, where possible enemy ambushes could lay in waiting. You must be very careful here.

Be sure to check out both sides before you enter into one of these areas. Also, be sure to check for possible land mines that may have been planted on the path. Finally be careful of curves in the road or areas that you cannot avoid by taking detours. Be extremely careful whenever you cross bridges.

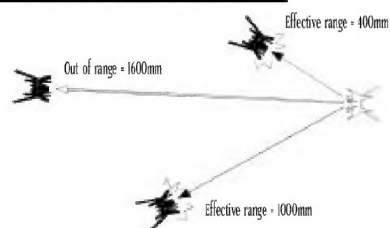
• Rivers

At the present time, a VT's water proofing/resistance is far from sufficient. In tests of up to 10 metres of water, VT movement was manageable. However, immersion in greater depths leads to water penetration into the various joint sections and damage to the VT. At 20 metres of water, the VT breaks down and completely stops. It is essential that you examine the depth of the water that you are crossing over or through before proceeding.

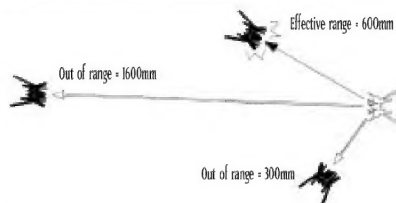
SLIDESTEP FUNCTION



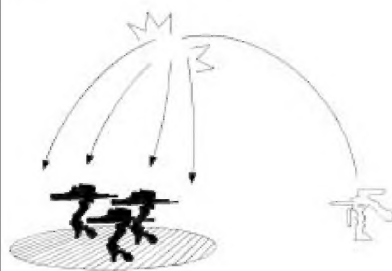
EFFECTIVE TARGETING RANGE (270mm Rifle) (0-1500mm)



EFFECTIVE TARGETING RANGE (MK34 Rocket Cannon) (500-1000mm)



GROUND SUPPRESSION FIRE



5-7 USING EFFECTIVE TARGET RANGE

One very important aspect of a VT battle is having equipment that does more damage than the enemy's and gives you the advantage in a fight. This is particularly true when your effective targeting range is farther than the other opponent's, as you can then "out-range" them. If you have more range than the enemy, then you only need to approach far enough to get a shot. If you have a chance to destroy the enemy without taking damage, you should use that opportunity to its best advantage. Don't put your VT or yourself in unnecessary danger.

5-8 LAND SUPPRESSION ATTACK

Weapons such as the grenade cannon, MLRS and napalm explode near the surface of the ground and do damage to enemies within a certain radius. Laying down this "suppression fire" can be a very effective tactic for dealing with enemies grouped in a cluster.

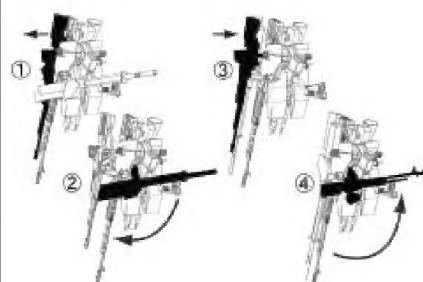
5-9 WEAPON CHANGE

One of the key areas where VTs surpass other units is in their ability to equip a wide variety of different weapons. A VT can carry 3 main weapons and 3 sub weapons. However, only one of each can be fired at a time. Choose main and sub weapons by pressing the **weapon controls button**.

5-10 RELOADING MAGAZINE WEAPONS

Some weapons in your arsenal use magazines. Whenever you need to reload a magazine into the weapon, press the **magazine change button**. Your remaining bullets and number of extra magazines are listed on the control panel.

WEAPON CHANGE SYSTEM

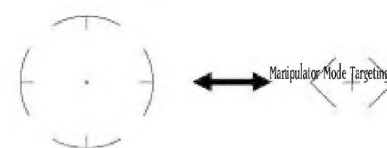


4-11 MANIPULATOR CONTROLS

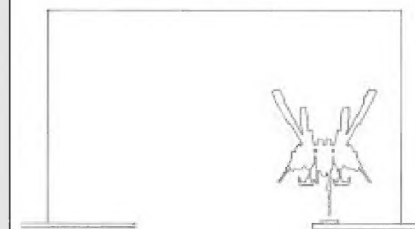
A manipulator in the VT controls an arm capable of opening and closing doors and moving cargo. It is attached to the left side of the main hull. Pressing the **manipulator button** turns it on. By centring the manipulator on a target and pressing the **sub weapon button** you can pick up the object. Since you must press the **sub weapon button** to use the manipulator, you can not use any sub weapons during this time.

MANIPULATOR

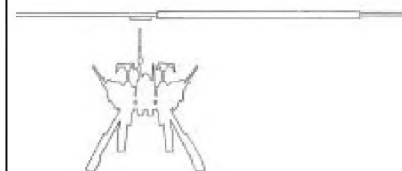
Normal Sub Weapon Targeting



USING THE MANIPULATOR TO CONTROL AN ELEVATOR



USING THE MANIPULATOR TO OPEN AND CLOSE CARGO DOORS



RECOVERING ITEMS USING THE MANIPULATOR



VT MONITOR

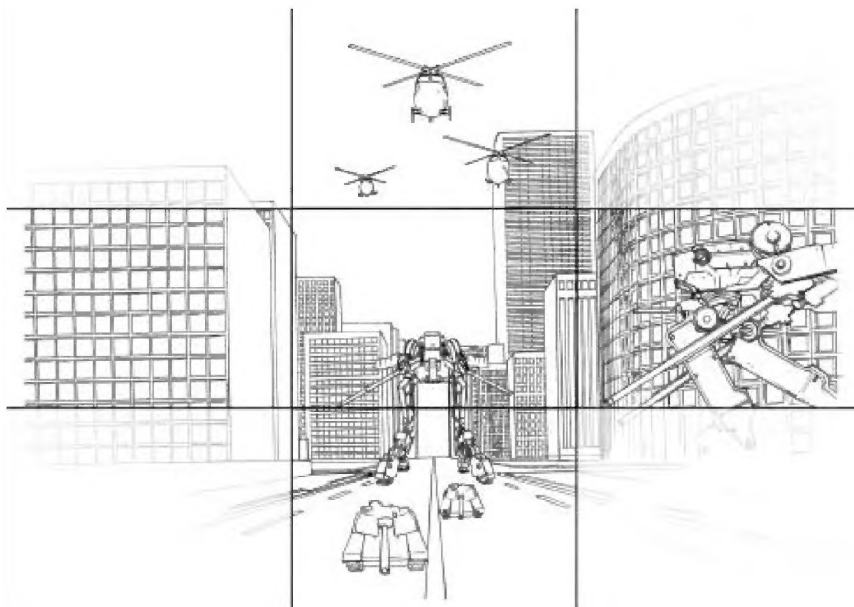
4-12 MAIN CAMERA CHANGE

The VT's perspective is determined by the main camera. That image is displayed within the cockpit. The camera is normally facing front and centre. By pressing the **knob** on the **left pilot stick** **↑**, **↓**, **←** or **→** you can increase the amount of viewable area. By pressing the **control stick knob** you can re-centre the view on the direct centre of the VT. By using this and the VT's sub-monitor (described later) you will be able to move your VT, improving its usefulness in battle.

4-13 MAIN CAMERA DUST AND DIRT

While in battle, you must be able to see clearly out of your main screen. In any instance that the screen becomes grey with dust or dirt, press the **washing button** to clean it up.

CAMERA PERSPECTIVES



5-4 FSS (Target Estimating Firing System)

The FSS is a firing system that was developed to analyse combat data and movement patterns of enemy VTs

Pressing the **FSS button** on the **targeting stick** switches the firing mode from normal to Target Estimating Firing System, allowing you to automatically focus on the location where the enemy will most likely go next. Pressing the **FSS button** again returns to normal firing mode.

Note: The FSS is a new function of the 2nd generation OS and therefore is not loaded on VTs with a first generation OS. The estimation data on the enemy's movement pattern is not perfect, and if the opponent is well trained then it can perform moves that the FSS is incapable of estimating. There are some opponents, therefore, that the FSS will not be effective on.

5-5 FIRING RANGES OF DIFFERENT WEAPONS

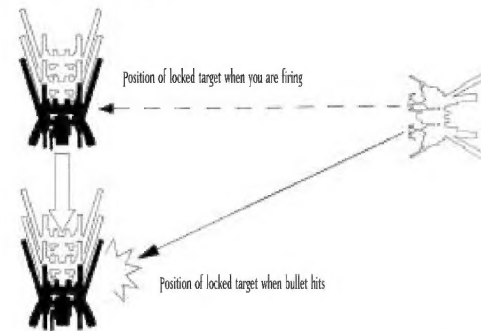
Each weapon has a firing range. The pilot should have a firm grasp of both the maximum and the most effective firing range for each weapon. The effective firing range for each weapon is displayed either to the left or right of the main monitor target and is set by the artillery control system.

The main weapon's prime target range is listed to the right of the targeter. The sub weapon's prime target range is listed to the left. The prime target range for both weapons overlaps the targeter. If the enemy goes out of a range, a message appears telling you that the enemy is out of range.

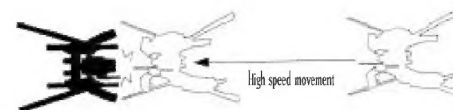
5-6 NOTES ON FIRING WITHIN EFFECTIVE TARGET RANGE

The effective target range was set up mainly to display the effective target range on the main monitor. However it was basically designed for anti-VT fighting. When you're fighting an opponent with less armour than the VT (such as a tank), there is a good chance that shots will have enough power to kill some enemies that are out of range. Also, the effective target range is programmed based on thickness of the VT armour, as set by Pacific Rim Organisation standards. Therefore if a target with heavy armour is in the effective targeting range, there is the chance that it will not take damage. Be careful.

FSS FIRING LINES

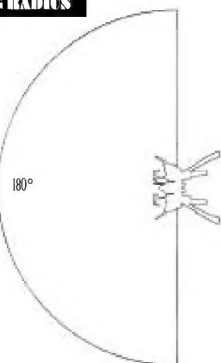


WHEN USING THE PLASMA TORCH



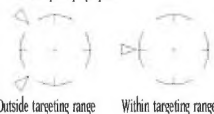
SECTION 5. VT ATTACK

TARGETING RADIUS

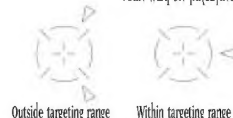


TARGETING DISTANCE

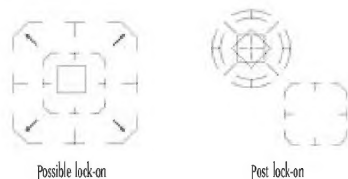
SUB WEAPON TARGETING



MAIN WEAPON TARGETING



LOCK-ON



5-1 WEAPON TARGETING AND SHOOTING

Weapon targeting is performed by using the **right targeting stick** to place the targeter over the enemy on the screen. The upper body weapons are capable of moving independently and therefore give the VT a maximum 180° targeting radius. After you place the cursor over the enemy, you can fire your main weapon by pressing the **main weapon trigger** or your sub weapon by pressing the **sub weapon trigger**.

5-2 LOCK-ON FUNCTION

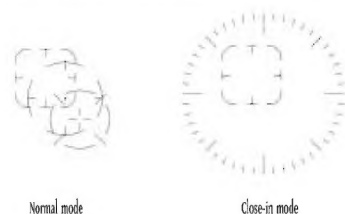
In the VT, a special lock-on feature automatically targets certain enemies. Once the targeter begins flashing on screen, pressing the **lock-on button** on the **right targeting stick** allows you to lock-on. While locked-on, if you press either your **main weapon** or **sub weapon** triggers you will automatically target the enemy. You can unlock the lock-on by pressing the **lock-on button** again when the targeted enemy is destroyed, or if the enemy slips off your screen.

Note: Because the lock-on function was basically designed for anti-VT use, any other targets besides the VT or enemy cannons will not work with the lock-on feature.

5-3 CLOSE COMBAT TARGETING

Within the VT's sub weapons are several close combat weapons. The ALC205 plasma torch is a good example since it can only be used on a VT, and is quite a special weapon. However, you must be careful. If you use one of these weapons then your target will be slightly different from normal and you will switch into close combat mode. This targeting mode is useful for close fighting with a quick enemy that is immediately in front of you. The targeter will only work on items right in front of your VT. If you press the **sub weapon button** while the enemy is right in front of you, you will charge forward and strike with your plasma torch.

CYCLOS IN NORMAL AND CLOSE-IN FIGHTING



4-14 SUB MONITOR FUNCTIONS

By pressing the **sub monitor mode select button** under the main monitor you can switch between four modes.

• Front View Mode

Shows what is directly in front of the VT. Use this view with the site change function to view things more effectively.

• Back View Mode

Shows what is directly behind the VT. As with the front view, by using this view with the site change function you can view things more effectively.

• Lock-On View Mode

Used to zoom in on the locked on target. A target that is very far away will be displayed in the sub monitor even without zooming in.

• Sky View Mode

This view shows the VT from 50 metres above it. It is useful for seeing blind spots and for looking around objects.

4-15 NIGHT VISION EQUIPMENT

A night vision scope has been loaded into the VT for use in low light situations such as at night or in smoky environments. Use the scope by pressing the **night scope button** on the control panel. The VT uses the Passive Type JGV5-V442 that projects infrared light at a subject and then displays it in picture format on the screen. The night vision scope can be used not only in darkness and smoky areas, but also to help detect camouflaged targets. The scope sights up to about 2.5 kilometres and the display is shown on your normal monitor. When you are using the scope in darkness, flashes in battle or from a flash grenade will temporarily make the scope go black and you will be unable to see.

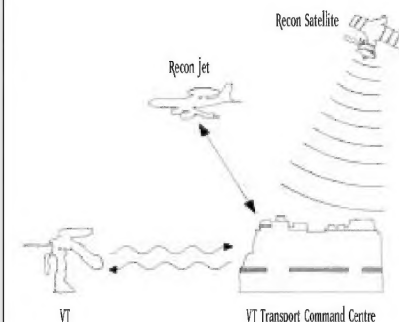
JCS (Complete Command System)

4-16 JCS SUMMARY

JCS is a system that uses war strategy data and the most recent information to increase the effectiveness of the VT to its maximum. Its main purpose is to supply the latest information concerning the battlefield, friendly forces, the enemy and other companies/ battalions. This system is designed to increase the overall effectiveness of the VT in battle. VT pilots as well as platoon commanders must be able to use it effectively.

The JCS uses a network that runs from the VT transport command room to the command rooms of the various companies/battalions, so it helps carry the latest news back and forth to the right people. This system sends messages from VT video monitors, recon satellites, and other command divisions, and edits the data in real time in the Battalion Command Rooms. Then it analyses the data and sends it to the various platoons. The various data is sent to the VT over a communications network and is displayed within the various monitors in the cockpit. Thanks to this system, pilots can check the map, enemy locations, and manage support fire for the forces.

COMPLETE COMMAND SYSTEM NETWORK SUMMARY CHART



4-17 MULTI-MONITOR DISPLAY

The multi-monitor display in the upper area of the main monitor is used to display information sent from the Master Command Centre. The multi-monitor is not always displayed. You can toggle its display on and off by pressing the **multi-monitor open/close button**.

4-18 INFORMATION DISPLAYED IN THE MULTI-MONITOR

The following information is shown on the multi-monitor.

1. War Map

Shows a 25 kilometre radius of the surrounding area. Use the **zoom in/out button** to zoom the map to a maximum area of 5,000km radius.

2. Personal VT Information

Shows the current statistics and state of your VT. Use this to check how much spare armour or fuel that you have.

3. Mission Objective

Shows information concerning the main objective for the current mission. If there is a sudden change in the mission then that information is displayed here. Pilots and especially platoon commanders should ensure that they check this.

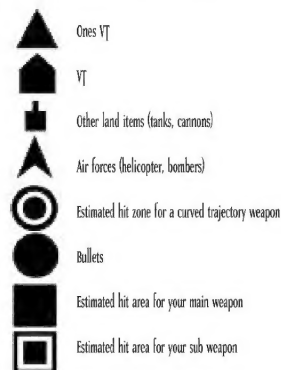
4. Platoon

Shows only the data of the platoon commander. You can check to see what the current commands are to the other members of that platoon.

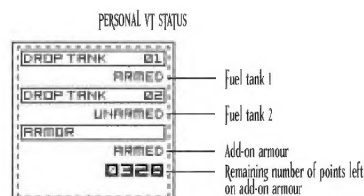
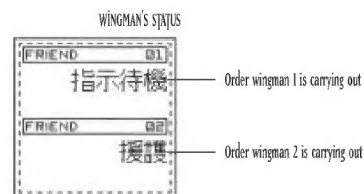
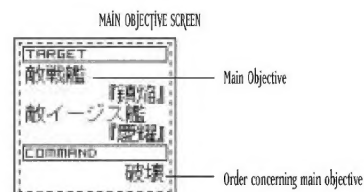
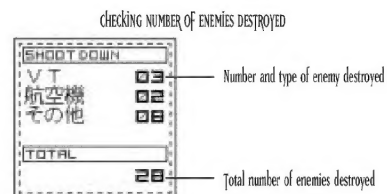
5. Enemy Information

Shows information about the enemy VTs: their weapons' firing distance, attack power, etc. Also displays data on various support machines.

MAP MONITOR DISPLAY



MULTI-MONITOR DISPLAY



EMERGENCY PROCEDURES

4-19 EVACUATION SETUP

An evacuation feature has been added to the VT to protect the pilot's safety. If you continually take damage, if your resistance armour is depleted (see section 2-5), or if your VT reaches dangerous levels, then protect yourself by ejecting as soon as possible. The protective gel layer surrounding the cockpit will become the escape pod and a small rocket placed below the escape pod will jettison you away.

4-20 EMERGENCY EJECT SWITCH

The **emergency eject switch** is located on the right side of the console. It is surrounded by a black and yellow glass cover.

The switch is on the same side as the **Start button**, so be sure not to press the **Start button** accidentally. When you press the switch, your cockpit is fired out the back of your VT. As you are ejected the gel block coating forms an airbag surrounding your cockpit on all sides to protect you from the shock of the landing.

4-21 EMERGENCY ESCAPE PROCEDURES IN RIVERS OR SEAS

Because the VT is not 100% watertight or waterproof, it cannot navigate in bodies of water deeper than 20 metres and will be unable to move in those instances. If you fall into water deeper than 20 metres, the water will begin seeping through the gel coated cockpit, forcing you to eject. Ejecting while in water is the same as on land. The gel coating will form an airbag lifting you to the surface.

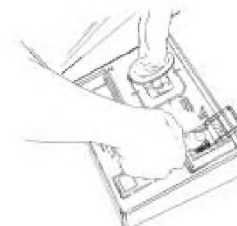
4-22 FIRE IN THE HULL

Whenever a fire breaks out in the hull, you must act quickly. Flame thrower damage and getting shot too many times can start a fire that does damage to the armour and weakens the resistance armour of your VT. If the fire warning alarm goes off and the cockpit warning lights are flashing, then check to see which area the fire is in and press the **fire extinguisher button** on the control panel.

RESISTANCE ARMOUR REACHING CRITICAL MASS



EMERGENCY EJECT SWITCH



PILOT EJECT PROCEDURE

